

Title (en)

SINGLE SOURCE PHOTOACOUSTIC REMOTE SENSING (SS-PARS)

Title (de)

PHOTOAKUSTISCHE FERNERFASSUNG MIT EINZELQUELLE (SS-PARS)

Title (fr)

TÉLÉDÉTECTION PHOTOACOUSTIQUE À SOURCE UNIQUE (SS-PARS)

Publication

EP 3938772 A4 20221130 (EN)

Application

EP 20773009 A 20200303

Priority

- US 201962818967 P 20190315
- IB 2020051804 W 20200303

Abstract (en)

[origin: CA3132432A1] A photoacoustic remote sensing system for imaging a subsurface structure in a sample, comprising exactly one laser source configured to generate a pulsed or intensity-modulated excitation beam configured to generate ultrasonic pressure signals in the sample at an excitation location, and an interrogation beam incident on the sample at the excitation location, a portion of the interrogation beam returning from the sample that is indicative of the generated ultrasonic pressure signals, an optical system configured to focus the excitation beam and the interrogation beam below a surface of the sample, a detector configured to detect the returning portion of the interrogation beam, and a processor configured to calculate an image of the sample based on a detected intensity modulation of the returning portion of the interrogation beam from below the surface of the sample.

IPC 8 full level

G01N 29/14 (2006.01); **A61B 1/00** (2006.01); **A61B 1/06** (2006.01); **A61B 5/00** (2006.01); **A61B 5/02** (2006.01); **A61B 5/145** (2006.01);
G01N 21/17 (2006.01); **G01N 21/64** (2006.01)

CPC (source: EP IL US)

A61B 1/0004 (2013.01 - EP IL US); **A61B 1/00117** (2013.01 - IL); **A61B 1/00172** (2013.01 - EP IL US); **A61B 1/0615** (2013.01 - EP IL US);
A61B 5/0035 (2013.01 - EP IL US); **A61B 5/0095** (2013.01 - EP IL US); **A61B 5/02042** (2013.01 - IL); **A61B 5/14532** (2013.01 - EP IL US);
A61B 5/14542 (2013.01 - EP IL US); **G01N 21/1702** (2013.01 - EP IL US); **G01N 21/64** (2013.01 - EP IL US); **A61B 1/00117** (2013.01 - EP US);
A61B 5/02042 (2013.01 - EP US); G01N 2021/1706 (2013.01 - EP IL US); G01N 2201/0683 (2013.01 - IL US); G01N 2201/08 (2013.01 - IL US)

Citation (search report)

- [YD] US 2016113507 A1 20160428 - REZA PAR SIN HAJI [CA], et al
- [Y] US 2018095026 A1 20180405 - PRASAD NARASIMHA S [US]
- [A] US 2014060189 A1 20140306 - SAUSA ROSARIO [US], et al
- See also references of WO 2020188386A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 202020102104 U1 20200519; AU 2020243527 A1 20211111; CA 3132432 A1 20200924; CN 113597555 A 20211102;
CN 113597555 B 20240719; EP 3938772 A1 20220119; EP 3938772 A4 20221130; IL 286185 A 20211031; JP 2022524857 A 20220510;
US 11564578 B2 20230131; US 11950882 B2 20240409; US 2021199566 A1 20210701; US 2023225618 A1 20230720;
WO 2020188386 A1 20200924

DOCDB simple family (application)

DE 202020102104 U 20200303; AU 2020243527 A 20200303; CA 3132432 A 20200303; CN 202080021598 A 20200303;
EP 20773009 A 20200303; IB 2020051804 W 20200303; IL 28618521 A 20210905; JP 2021555290 A 20200303; US 202016647076 A 20200303;
US 202218069791 A 20221221